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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR   | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|------------------------|---------------------|------------------|
| 10/779,859  | 02/18/2004  | Mikhail Abramovich Gan | Q79849              | 6217             |
| 23373   | 7590        | 09/13/2005             | EXAMINER            |                  |
| SUGHRUE MION, PLLC<br>2100 PENNSYLVANIA AVENUE, N.W.<br>SUITE 800<br>WASHINGTON, DC 20037 |             |                        | SPECTOR, DAVID N    |                  |
|   |             |                        | ART UNIT            | PAPER NUMBER     |
|   |             |                        | 2873                |                  |

DATE MAILED: 09/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                     |                         |  |
|------------------------------|-------------------------------------|-------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b>              | <b>Applicant(s)</b>     |  |
|                              | 10/779,859                          | GAN ET AL.              |  |
|                              | <b>Examiner</b><br>David N. Spector | <b>Art Unit</b><br>2873 |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 04 August 2004.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-23 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-23 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 18 February 2004 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Background/Status Information***

As noted in the previous Office action mailed on May 4, 2005, Claims 1-23 have all been examined on their merits and are all currently pending in this application. In particular: Claims 1-23 stand rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling; Claims 1-23 stand rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements; Claims 1-23 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention; Claims 1, 8, 20 and 21 stand rejected under 35 U.S.C. 102(b) as being anticipated by Sakamoto et al. (U.S. Patent No. 6,275,342); and a Substitute Specification (including the claims) is required pursuant to 37 CFR 1.125(a) because the current specification is replete with terms which are not clear, concise and exact.

***Response to Amendments/Arguments***

The above-noted rejection of Claims 1-23 under 35 U.S.C. 112, second paragraph (for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention) has been overcome by amendments/arguments filed by applicant on August 4, 2005.

The Substitute Specification filed on August 4, 2005 has been entered. However, as noted in the previous Office action, the (continued) incorporation of essential material in the specification (Page 1, Lines 2-4) by reference to an unpublished U.S. application, foreign application or patent, or to a publication is improper. Applicant is required to amend the Substitute Specification to include the material incorporated by reference, if the material is relied upon to overcome any objection, rejection, or other requirement imposed by the Office.

Applicants' arguments regarding the above-noted rejection of Claims 1-23 under 35 U.S.C. 112, first paragraph, and/or the rejection of Claims 1-23 under 35 U.S.C. 112, second paragraph as being incomplete by omitting essential elements have been considered by the examiner but are not found to be persuasive for the following reason(s).

IN REGARD TO THE REJECTION OF CLAIMS 1-23 UNDER 35 U.S.C. 112, FIRST PARAGRAPH, FOR LACK OF ENABLEMENT, applicants assertion(s), in amendments/arguments filed by applicant (on August 4, 2005) that: "*the Patent Office simply states, without any supporting rationale, that the lens system would not have sufficient optical power for image focusing and/or image formation without the auxiliary lens element*" (Page 11, Lines 11-13); and the further assertion that, "*critically the Patent Office has not cited any text passage in the instant specification that unequivocally states that the auxiliary element is necessary for the invention to work without undue experimentation*" (Page 11, Lines 16-18) are groundless. In the previous Office action (mailed on May 4, 2005) the examiner expressly notes: "*A lens system comprising an element of symmetrical shape and a similar magnifying power to the entire objective lens system (e.g. from the instant specification: Page 6, Line 10-11) [emphasis added] critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure*". The examiner then further observes/concludes: "*Since the aforesaid element is invested with substantially all of the optical power of the lens system it is clearly essential to the practice of the invention (e.g. inasmuch as said lens system would not have sufficient optical power for image formation and/or focusing without the aforesaid element)* [emphasis added].

IN REGARD TO THE REJECTION OF CLAIMS 1-23 UNDER 35 U.S.C. 112, SECOND PARAGRAPH, FOR BEING INCOMPLETE BY OMITTING ESSENTIAL ELEMENTS, applicants assertion(s) in amendments/arguments filed by applicant (on August 4, 2005) that: "*The Patent Office has not cited any text passage in the instant specification that unequivocally states that the auxiliary*

*element is absolutely necessary for the invention to operate" (Page 12, Lines 11-13) are similarly groundless; inasmuch the examiner expressly notes in the previous Office action (mailed on May 4, 2005): "A lens system comprising an element of symmetrical shape and a similar magnifying power to the entire objective lens system (e.g. from the instant specification: Page 6, Line 10-11) [emphasis added] critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure". The examiner then further observes/concludes: "Since the aforesaid element is invested with substantially all of the optical power of the lens system it is clearly essential to the practice of the invention (e.g. inasmuch as said lens system would not have sufficient optical power for image formation and/or focusing without the aforesaid element) [emphasis added].*

Applicants' arguments regarding the above-noted rejection of Claims 1, 8, 20 and 21 under 35 U.S.C. 102(b) have been considered by the examiner but are not found to be persuasive. As amended by applicant, the scope of each of the aforesaid independent claims remains unchanged except for minor changes in the wording therein (e.g. intended to overcome the above-noted rejection of Claims 1-23 under 35 U.S.C. 112, second paragraph (for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention). The aforesaid amended independent claims stand rejected under 35 U.S.C. 102(b).

**Claim Rejections - 35 USC § 112/1<sup>st</sup>**

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-23 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. A lens system comprising an element of "symmetrical shape and a similar magnifying power to the entire lens system" (*e.g. from the instant specification: Page 6, Line 10-11*) critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). Since the aforesaid element is invested with substantially all of the optical power of the lens system it is clearly essential to the practice of the invention (*e.g. inasmuch as said lens system would not have sufficient optical power for image formation/focusing without the aforesaid element*).

***Claim Rejections - 35 USC § 112/2nd***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1-23 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. The omitted elements are: a lens with symmetrical shape and a similar magnifying power to the entire lens system (Page 6, Line 10-11). See MPEP § 2172.01.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**FOR EXAMINATION PURPOSES ONLY:** IN VIEW OF THE REJECTIONS OF APPLICANTS' CLAIMS 1-23 UNDER 35 U.S.C. 112, SECOND PARAGRAPH, ABOVE IN THIS OFFICE ACTION, THE FOLLOWING INTERPRETATIONS OF FEATURES/LIMITATIONS RECITED IN APPLICANT'S CLAIMS HAVE BEEN FOLLOWED: "POSITIVE ELEMENT" IS INTERPRETED TO MEAN --POSITIVE COMPONENT--; "NEGATIVE ELEMENT" IS INTERPRETED TO MEAN --NEGATIVE COMPONENT--; "CONVEX LENS" IS INTERPRETED TO MEAN --POSITIVE LENS--, "HOLOGRAM OPTICAL ELEMENT" IS INTERPRETED TO MEAN -- OPTICAL ELEMENT INCORPORATING A HOLOGRAM--.

Claims 1, 8, 20 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Sakamoto et al. (U.S. Patent No. 6,275,342).

In regard to independent Claim 1 Sakamoto discloses a lens system (col. 3, ln. 12-14, 15-34); **FIG. 1)** comprising positive 'element' Gr2[,] positioned in an optical path of incident light, including a first negative lens r8|d8|r9, a 'convex' lens r5|d5|r6, and a hologram optical element[,] r11\*(HOE); and a negative 'element' Gr1[,] positioned in the optical path, including a negative lens r1\*|d1|r2. Independent Claim 1 is therefore anticipated by Sakamoto et al.

In regard to independent Claim 8 Sakamoto discloses a lens system (col. 3, ln. 12-14, 15-34); **FIG. 1)** comprising positive 'element' Gr2[,] positioned in an optical path of incident light, including a positive lens r10\*|d10|r11\*(HOE), a 'convex' lens r5|d5|r6, and a hologram optical element[,] r11\*(HOE); and a negative 'element' Gr1 [,] positioned in the optical path, including a second negative lens r1\*|d1|r2. Independent Claim 8 is therefore anticipated by Sakamoto et al.

In regard to independent Claim 20 Sakamoto discloses an objective lens system (e.g. a zoom lens) comprising a lens system (col. 3, ln. 12-14, 15-34); **FIG. 1)** comprising positive 'element' Gr2[,] positioned in an optical path of incident light, including a first negative lens r8|d8|r9, a

'convex' lens **r5|d5|r6**, and a hologram optical element[,] **r11\*(HOE)**; and a negative 'element' **Gr1**[,] positioned in the optical path, including a negative lens **r1\*|d1|r2**. Independent Claim 20 is therefore anticipated by Sakamoto et al.

In regard to independent Claim 21 Sakamoto discloses an objective lens system (e.g. a zoom lens) comprising a lens system (col. 3, ln. 12-14, 15-34); **FIG. 1**) comprising positive 'element' **Gr2**[,] positioned in an optical path of incident light, including a positive lens **r10\*|d10|r11\*(HOE)**, a 'convex' lens **r5|d5|r6**, and a hologram optical element[,] **r11\*(HOE)**; and a negative 'element' **Gr1**[,] positioned in the optical path, including a second negative lens **r1\*|d1|r2**. Independent Claim 21 is therefore anticipated by Sakamoto et al.

***Other Remarks/Information***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications

is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any other inquiry concerning this communication or earlier communications from the examiner should be directed to David N. Spector whose telephone number is (571) 272-2338. The examiner can normally be reached at this number Monday through Friday between 6:00 AM and 2:30 PM. The Official FAX number for the United States Patent and Trademark Office is (571) 273-8300.

September 9, 2005



DAVID N. SPECTOR  
PRIMARY EXAMINER